

4442

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Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
State: Wash.
11-5613
DESCRIPTIVE REPORT.
Hydrog. Sheet No. 4442
LOCALITY:
Willapa Bay
Off C. Shoalwater
1924
CHIEF OF PARTY:
R. B. Derickson

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET # ~~4442~~

North Channel,
Entrance to Willapa Bay,
Washington

DESCRIPTIVE REPORT
to accompany
Hydrographic Sheet # 4442

Authority for this survey contained in the Director's telegram dated Feb.7, 1925, to the Inspector, Seattle Field Station.

Written orders from the Inspector, giving instructions for executing the work, were received by the officer in charge on Feb.7, 1925.

According to arrangements made with the Lighthouse Service, Portland, Ore., the Str. MANZANITA was to be at Tokeland, Wash., on Monday Feb.9, but did not arrive until 5 P.M., Thursday, Feb.12, 1925.

While waiting for the MANZANITA at Tokeland, a tide staff was installed on the dock at Toke Pt. and connected by levels to bench marks established in 1922.

On Friday, Feb.13, no fix was obtainable until about 3 P.M., when we started placing the buoys marking the channel as shown by the 1924 survey.

The fixes locating these buoys were obtained as the anchor of each buoy was dropped over the side of the ship. While placing buoys number 6A and number 4A, Δ Lead³ was taken, with difficulty, as right object. While placing buoy No. 2A and the P.S. (perpendicular striped) buoy, it was impossible to see Δ Lead even with glasses, so the tangent of the tree line about 2.1 miles Sx~~E~~ of Δ Lead on Leadbetter Point was used as right object. (Tree^A)

Saturday morning, Feb.14, a system of lines were run using for a right object the tangent mentioned above. The reasons for running the lines at this time using the tangent as right object were as follows: There was very little probability of Δ Lead showing that day; the tangent used was very definite from the North Channel and would very likely be easily located later; and finally, the MANZANITA was to leave for Astoria on the afternoon of that date, which fact would mean that a hired launch and crew would need to stand by, possibly for several days, if a survey were to be made using Δ Lead.

By comparing the 1924 survey of the North Channel with the previous survey and from local reports of those who have watched it in heavy weather, this channel is evidently making to the southward. And probably there is now deeper water than shown by the 1924 survey, within the area of the three fathom curve, which bears S.W. of buoy number 2A as now placed. However, there is a 14 foot sounding shown within this area by the latest chart, and since the MANZANITA draws 14 feet, the Captain did not wish to sound this area with the swell which was running.

According to instructions lines were spaced from 100 to 150 meters apart and run with the channel over the critical part of the bar.

Soundings were taken underway with a hand lead.

Due to the arrangement of the wheel house, it was not practicable to take angles from there, but it was the only satisfactory place to plot. Therefore, Lt. R.W. Knox took right angle and Mr. Gothie, mate on the MANZANITA, took left angle, from the top-side. Several times when I had the opportunity I checked the left angle and found that it was taken correctly.

Before a fix was obtainable on Saturday morning, the Captain of the MANZANITA ran two lines of soundings to satisfy himself that he had placed the buoys in the proper channel. These soundings were recorded in the record book with time and course, but are not plotted on the hydrographic sheet.

The MANZANITA left immediately for Astoria, after putting our party ashore in Tokeland.

Mr. Jankowski, who was doing triangulation to locate Lead 3 in Willapa Bay, also located the tangent used in the hydrography. The geographic position which he obtained by triangulation, checked the topography of the chart.

Respectfully submitted,

Approved:
R. S. Allen
Inspector Coast and Geodetic Survey,
204 Burke Building,
Seattle, Washington.

Henry E. Finnegan
H. E. Finnegan
Jr. H. & G. E., C. & G. Survey.

STATISTICS

<u>1925</u>	<u>Letter</u>	<u>Vol.</u>	<u>Positions</u>	<u>Soundings</u>	<u>Miles</u> <u>Stat.</u>	<u>Vessel</u>	<u>Locality</u>
Feb. 13	a	1	10	21	1	MANZANITA	Willapa Bay.
" 14	b	1	80	265	14.3	"	" "

March 23, 1928

Section of Field Records

~~Division of Hydrography and Topography:~~

Division of Charts:

Tide reducers are approved in
1 volume of sounding records for

HYDROGRAPHIC SHEET 4442

Locality: Entrance to Willapa Bay, Washington

Chief of Party: H. E. Finnegan in 1928

Plane of reference is mean lower low water and is
3.1 ft. on tide staff at Toke Point, Willapa Bay, Washington

For reduction of soundings, condition of records satisfactory
except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time Meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks



Chief, Division of Tides and Currents.

Hydrographic Sheet No. 4442
Willapa Bay "Washington"

The area covered by this survey while generally closely developed but certain open areas appear which one or more additional would have covered. However there appears no evidence of existing shoals in these open areas and no additional work is necessary.

The scale of 1:40,000 is considered too small for so close a development as all soundings could not be plotted; All previous sheets are on a scale of 1:20,000.

Records good. Protracting and plotting good.

John D. Torrey.
May 16, 1925

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

May 28, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4442

Willapa Bay Bar, Washington

Surveyed in 1925.

Instructions dated February 7, 1925 -- No details specified.

Chief of Party, R. B. Derickson.

Surveyed, protracted and soundings plotted by H. E. Finnegan.

Verified and inked by J. D. Torrey.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development conform to the requirements of the General Instructions.
3. The sounding line crossings are adequate.
4. The information is sufficient for drawing the usual depth curves.
5. The usual field plotting was done by the field party.
6. The scale (1/40,000) on which this survey is plotted appears to be unnecessarily small and all the soundings could not be plotted, and comparison with the previous work on 1/20,000 scale is rendered difficult.
7. No further surveying is required.
8. The character and scope of the surveying and field drafting are excellent.
9. Reviewed by E. P. Ellis, May, 1925.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4442

State Washington.

General locality Willapa Bay Entrance.

Locality Off C. Shoalwater
North Channel.

Chief of party . . H. E. Finnegan, in charge of sounding party
R. B. Derickson, Chief of Party

Surveyed by . . . H. E. Finnegan.

Date of survey . . February 13 and 14, 1925.

Scale 1 : 40,000.

Soundings in . . . Feet.

Plane of reference . M. L. L. W.

Protracted by H. E. F. . . Soundings in pencil by H. E. F.

Inked by J. D. Torrey. Verified by J. D. Torrey.

Records accompanying sheet (check those forwarded):

Des. report, 1 Tide books, Boat sheets,

1 Sounding books, Wire-drag books, Photographs.

Data from other sources affecting sheet

Remarks: